

**IN THE CLAIMS:**

- 1 1. (Currently Amended) A system comprising:  
2 a plurality of network resources configured to process received block-based  
3 protocol data access requests; and  
4 a plurality of virtual servers each allocated a logical partitioning of the network  
5 resources to establish an instance of a ~~multi-protocol-server~~ comprising a processor and a  
6 memory, each virtual server configured to service the block-based data access requests by  
7 converting the block-based protocol requests to appropriate file system data requests,  
8 each virtual server further configured to share access to resources of the file system; and  
9 each virtual server associated with a different security domain and a context data  
10 structure including information pertaining to a ~~its associated~~ security domain of ~~that~~  
11 ~~virtual server~~ to enable controlled access to the allocated and shared resources of the  
12 server for that virtual server.
- 1 2. (Original) The system of claim 1 wherein the network resources comprise  
2 network interfaces assigned to one or more network address resources.
- 1 3. (Previously Presented) The system of claim 1 further comprising storage media  
2 configured to store information as units of storage resources, the units of storage  
3 resources allocated among each of the virtual servers.
- 1 4. (Original) The system of claim 3 wherein the units of storage resources comprise  
2 volumes.
- 1 5. (Original) The system of claim 3 wherein the units of storage resources comprise  
2 qtrees.
- 1 6. (Currently Amended) The system of claim 3 further comprising an operating  
2 system having a file system resource ~~adapted~~ configured to perform a boundary check to

3    verify that a request is allowed to access certain units of the storage resources on the  
4    storage media, each virtual server allowed shared access to the file system and further  
5    ~~adapted~~configured to create virtual disks within the units of storage resources and  
6    wherein each of the virtual disks associated with one or more of the virtual servers.

1    7.     (Currently Amended) The system of claim 6 wherein the operating system further  
2    comprises a user interface having a command set ~~adapted~~configured to operate on virtual  
3    disks, and wherein the command set executes within a context of a virtual server.

1    8.     (Currently Amended) The system of claim 7 wherein the user interfaces  
2    comprises a command line interface (CLI) ~~adapted~~configured to support the command  
3    set.

1    9.     (Currently Amended) The system of claim 8 wherein the CLI comprises a lun  
2    command ~~adapted~~configured to perform operations to a virtual disk associated with the  
3    context of the virtual server.

1    10.    (Previously Presented) The system of claim 9 wherein the lun command creates a  
2    logical unit number on a file system associated with the server, the logical unit number  
3    being associated with the context of the virtual server.

1    11.    (Original) The system of claim 8 wherein the CLI comprises an igroup command  
2    that generates a set of file system primitive for binding an initiator group to one or more  
3    initiator addresses and wherein the initiator group is associated with the context of the  
4    virtual server.

1    12.    (Original) The system of claim 1 wherein the block-based protocol comprises  
2    iSCSI.

1 13. (Original) The system of claim 1 wherein the block-based protocol comprises  
2 FCP.

1 14. (Cancelled).

1 15. (Currently Amended) The system of claim 1 wherein the ~~multi-protocol~~ server is  
2 further ~~adapted~~ configured to process data access requests in response to one or more file-  
3 level protocols.

1 16. (Currently Amended) A method for implementing a virtual server, the method  
2 comprising ~~the steps of~~:  
3 configuring a plurality of network resources to process received block-based  
4 protocol data access requests;  
5 allocating logical partitions of the network resources to establish a plurality of  
6 virtual servers as instances of a ~~multi-protocol~~ server, comprising a processor and a  
7 memory, configured to service the block-based data access requests by converting the  
8 block-based protocol requests to appropriate file system primitives; and  
9 providing a context data structure to each virtual server, the context data structure  
10 including information pertaining to a security domain of that virtual server to enable  
11 controlled access to the allocated and shared resources of the server for that virtual  
12 server.

1 17. (Currently Amended) The method of claim 16 further comprising ~~the step of~~  
2 configuring storage media to store information as units of storage resources, the units of  
3 storage resources allocated among each of the virtual servers.

1 18. (Original) The method of claim 17 wherein the units of storage resources  
2 comprise volumes.

1 19. (Original) The method of claim 17 wherein the units of storage resources  
2 comprises qtrees.

1 20. (Currently Amended) A computer readable medium containing executable  
2 program instructions executed by a process, comprising:  
3 program instructions that configure a plurality of network resources to process  
4 received block-based protocol data access requests;  
5 program instructions that allocate logical partitions of the network resources to  
6 establish a plurality of virtual servers as instances of a ~~multi-protocol~~ server, comprising  
7 a processor and a memory, configured to service the block-based data access requests by  
8 converting the block-based protocol requests to appropriate file system primitives; and  
9 program instructions that provide a context data structure to each virtual server,  
10 the context data structure including information pertaining to a security domain of that  
11 virtual server to enable controlled access to the allocated and shared resources of the  
12 server for that virtual server.

1 21-23. (Cancelled).

1 24. (Currently Amended) A method, comprising:  
2 receiving a block-based data access request from a client;  
3 forwarding the request to a virtual server of a plurality of virtual servers of a  
4 server comprising a processor and a memory;  
5 performing security checks on the request using a context data structure provided  
6 to each virtual server, the context data structure including information pertaining to a  
7 security domain of that virtual to enable controlled access to allocated and shared  
8 resources of the server for that virtual server;  
9 converting the received block-based data access request to a file system data  
10 access request;  
11 in the event that the request passes the security checks, servicing the file system  
12 data access request to generate a response; and

13 forwarding the generated response to the client.

1 25. (Currently Amended) A system, comprising:  
2 a network interface to receive a block-based data access request from a client;  
3 the network interface to forward the request to a virtual server of a plurality of  
4 virtual servers of a server comprising a processor and a memory;  
5 the operating system to perform security checks on the request using a context  
6 data structure provided to each virtual server, the context data structure including  
7 information pertaining to a security domain of that virtual server to enable controlled  
8 access to allocated and shared resources of the server for that virtual server;  
9 in the event that the request passes the security checks, a process to convert the  
10 received block-based data access request to a file system data access request;  
11 the process to service the file system data access request to generate a response;  
12 and  
13 the process to forward the generated response to the client.

1 26. (Currently Amended) A computer readable media containing program  
2 instructions executed by a processor, comprising:  
3 program instructions that receive a block-based data access request from a client;  
4 program instructions that forward the request to a virtual server of a plurality of  
5 virtual servers of a server comprising a processor and a memory;  
6 program instructions that perform security checks on the request using a context  
7 data structure provided to each virtual server, the context data structure including  
8 information pertaining to a security domain of that virtual server to enable controlled  
9 access to the shared resources of the server for ~~the that file system~~ virtual server;  
10 program instructions that convert the received block-based data access request to  
11 a file system data access request;  
12 program instructions that service the file system data access request to generate a  
13 response in the event that the request passes the security checks; and

14 forwarding the generated response to the client.